Amendments to the Claims

The following listing of claims will replace all prior versions and listings of claims in this application.

1. (Currently amended) A substantially pure (E)-compound, a substantially pure (Z)-compound, or a mixture of (E)- and (Z)-compounds having the formula (I):

$$R^{2} \longrightarrow C = \stackrel{H}{c} - C \equiv \underline{N}$$

$$R^{3} \qquad (I)$$

wherein:

(a) X is -O- or -(C_nH_{2n}) in which n has a value of 0, 1, 2, or 3, and R^1 is selected from the group consisting of any alkyl of up to 10 carbon atoms, any monocycloalkyl of up to 10 carbon atoms, any polycycloalkyl of up to 10 carbon atoms, and or any benzocyclic alkyl of up to 10 carbon atoms, or

(b) X is -CH=, and R¹ is any alkylidene of up to 10 carbon atoms or any monocycloalkylidene of up to 10 carbon atoms;

R² is hydrogen, nitro, cyano, trifluoromethyl, carbethoxy, carbomethoxy, carbopropoxy, acetyl, carbamoyl, acetoxy, carboxy, hydroxy, amino, lower alkyl, lower alkoxy, or halo; and

R³ is (i) phenyl or naphthyl, each unsubstituted or substituted with 1 or more substituents each selected wherein each substituent is independently from the group consisting of a nitro, a cyano, a halo, a trifluoromethyl, a carbethoxy, a carbomethoxy, a carbopropoxy, an acetyl, a carbamoyl, a carbamoyl substituted with an alkyl of 1 to 3 carbon atoms, an acetoxy, a carboxy, a hydroxy, an amino, an amino substituted with an alkyl of 1 to 5 carbon atoms, an alkyl or cycloalkyl of 1 to 10 carbon atoms, and or an alkoxy or cycloalkoxy of 1 to 10 carbon atoms; or (ii) phenyl substituted with 1 or more substituents each selected wherein each substituent is independently from the group consisting of an alkylidenemethyl of up to 10 carbon atoms, a cycloalkylidenemethyl of up to 10 carbon atoms, a phenyl, and or a methylenedioxy; (iii) cycloalkyl of 4 to 10 carbon atoms, unsubstituted or substituted with one or more substituents each selected independently from the group consisting of a nitro, a cyano, a halo, a trifluoromethyl, a carbothoxy, a carbomethoxy, a carbopropoxy, an acetyl, a

carbamoyl, an acetoxy, a carboxy, a hydroxy, an amino, an amino substituted with an alkyl of 1 to 5 carbon atoms, an alkyl of 1 to 10 carbon atoms, an alkoxy of 1 to 10 carbon atoms, and a phenyl; or (iv) pyridine, substituted pyridine, pyrrolidine, imidazole, or thiophene.

- 2. (Canceled).
- 3. (Currently amended) The compound of mixture of claim 2 1, wherein: R² is hydrogen, nitro, cyano, trifluoromethyl, amino, lower alkyl, lower alkoxy, or halo; and

R³ is (i) phenyl or naphthyl, each unsubstituted or substituted with 1 or more substituents each selected independently from the group consisting of a nitro, a cyano, a halo, a trifluoromethyl, a carbethoxy, a carbomethoxy, a carbopropoxy, an acetyl, a carbamoyl, a carbamoyl substituted with an alkyl of 1 to 3 carbon atoms, an acetoxy, a carboxy, a hydroxy, an amino, an amino substituted with an alkyl of 1 to 5 carbon atoms, an alkyl or cycloalkyl of 1 to 10 carbon atoms, and or an alkoxy or cycloalkoxy of 1 to 10 carbon atoms; (ii) phenyl substituted with 1 or more substituents each selected independently from the group consisting of an alkylidenemethyl of up to 10 carbon atoms, a cycloalkylidenemethyl of up to 10 carbon atoms, a phenyl, and a methylenedioxy; (iii) cycloalkyl of 4 to 10 carbon atoms, unsubstituted or substituted with one or more substituents each selected independently from the group consisting of a nitro, a cyano, a halo, a trifluoromethyl, a carbethoxy, a carbomethoxy, a carbopropoxy, an acetyl, a carbamoyl, an acetoxy, a carboxy, a hydroxy, an amino, an amino substituted with an alkyl of 1 to 5 carbon atoms, an alkyl of 1 to 10 carbon atoms, an alkoxy of 1 to 10 carbon atoms, and a phenyl; or (iv) pyridine, substituted pyridine, pyrrolidine, imidazole, or thiophene.

4. (Currently amended) The compound of mixture of claim 1, wherein the compound formula (I) is:

$$\begin{array}{c|c}
R^2 & \longrightarrow & C = C - C \equiv N \\
\hline
R^1 - O & (I)
\end{array}$$

R¹ is alkyl of up to 10 carbon atoms; and

R² is hydrogen, trifluoromethyl; lower alkyl, or lower alkoxy; and

R³ is (i) phenyl or naphthyl, each unsubstituted or substituted with 1 or more substituents each selected independently from the group consisting of a nitro, a cyano, a halo, a trifluoromethyl, a carbethoxy, a carbomethoxy, a carbopropoxy, an acetyl, a carbamoyl, a carbamoyl substituted with an alkyl of 1 to 3 carbon atoms, an acetoxy, a carboxy, a hydroxy, an amino, an amino substituted with an alkyl of 1 to 5 carbon atoms, an alkyl or cycloalkyl of 1 to 10 carbon atoms, and or an alkoxy or cycloalkoxy of 1 to 10 carbon atoms; (ii) phenyl substituted with 1 or more substituents each selected independently from the group consisting of an alkylidenemethyl of up to 10 carbon atoms, a cycloalkylidenemethyl of up to 10 carbon atoms, a phenyl, and a methylenedioxy; (iii) cycloalkyl of 4 to 10 carbon atoms, unsubstituted or substituted with one or more substituents each selected independently from the group consisting of a nitro, a cyano, a halo, a trifluoromethyl, a carbethoxy, a carbomy, a carbopropoxy, an acetyl, a carbamoyl, an acetoxy, a carboxy, a hydroxy, an amino, an amino substituted with an alkyl of 1 to 5 carbon atoms, an alkyl of 1 to 10 carbon atoms, an alkoxy of 1 to 10 carbon atoms, and a phenyl; or (iv) pyridine, substituted pyridine, pyrrolidine, imidazole, or thiophene.

5. (Currently amended) The compound of claim 4, wherein:

R¹ is methyl or ethyl; and

R² is methoxy or ethoxy;

R³ is (i) phenyl or naphthyl, each unsubstituted or substituted with 1 or more substituents each selected independently from the group consisting of a nitro, a cyano, a halo, a trifluoromethyl, a carbethoxy, a carbomethoxy, a carbopropoxy, an acetyl, a carbamoyl, a carbamoyl substituted with an alkyl of 1 to 3 carbon atoms, an acetoxy, a carboxy, a hydroxy, an amino, an amino substituted with an alkyl of 1 to 5 carbon atoms, an alkyl or cycloalkyl of 1 to 10 carbon atoms, and or an alkoxy or cycloalkoxy of 1 to 10 carbon atoms; (ii) phenyl substituted with 1 or more substituents each selected independently from the group consisting of an alkylidenemethyl of up to 10 carbon atoms, a cycloalkylidenemethyl of up to 10 carbon atoms, a phenyl, and a methylenedioxy; (iii) cycloalkyl of 4 to 10 carbon atoms, unsubstituted or substituted with one or more substituents each selected independently from the group consisting of a nitro, a cyano, a halo, a trifluoromethyl, a carbothoxy, a carbomothoxy, a carbopropoxy, an acetyl, a carbamoyl, an acetoxy, a carboxy, a hydroxy, an amino, an amino substituted with an alkyl of 1 to 5 carbon atoms, an alkyl of 1 to 10 carbon atoms, an alkoxy of 1 to 10 carbon atoms, and a phenyl; or (iv) pyridine, substituted pyridine, pyrrolidine, imidazole, or thiophene.

6. (Original) A substantially pure (E)-compound, a substantially pure (Z)-compound, or a mixture of (E)- and (Z)-compounds having the formula (II):

$$0 \longrightarrow c = c - c \equiv N$$

$$(II)$$

- 7. (Currently amended) The compound <u>or mixture</u> of claim 1 wherein the compound <u>which</u> is selected from:
- 3,3-bis-(3,4-dimethoxyphenyl)acrylonitrile;
- 3,3-bis-(3-ethoxy-4-methoxyphenyl)acrylonitrile;
- 3-(3-propoxy-4-methoxyphenyl)-3-phenylacrylonitrile;
- 3-(3-ethoxy-4-methoxyphenyl)-3-phenylacrylonitrile;
- 3,3-bis-(3-cyclopentoxy-4-methoxyphenyl)acrylonitrile;
- 3-(3-cyclopentoxy-4-methoxyphenyl)-3-phenylacrylonitrile;
- 3-(3,4-dimethoxyphenyl)-3-phenylacrylonitrile;
- 3-(3,4-dimethoxyphenyl)-3-(3',5'-dimethoxyphenyl)acrylonitrile;
- 3-(3,4-dimethoxyphenyl)-3-(3-ethoxy-4-methoxyphenyl)acrylonitrile;
- 3-(3,4-dimethoxyphenyl)-3-(3'-nitrophenyl)acrylonitrile;
- 3-(3'-aminophenyl)-3-(3,4-dimethoxyphenyl)acrylonitrile;
- 3-(3,4-dimethoxyphenyl)-3-(4-nitrophenyl)acrylonitrile;
- 3-(4-aminophenyl)-3-(3,4-dimethoxyphenyl)acrylonitril;
- 3-(4-aminophenyl)-3-(3,4-dimethoxyphenyl)acrylonitrile;
- 3-(4-biphenylyl)-3-(3,4-dimethoxyphenyl)acrylonitrile;
- 3-(3,4-dimethoxyphenyl)-3-(4'-fluorophenyl)acrylonitrile;
- 3-(3,4-dimethoxyphenyl)-3-naphth-2-ylacrylonitrile;
- 3-(3,4-dimethoxyphenyl)-3-(3,4-methylenedioxyphenyl)acrylonitrile;
- 3 (3,4-dimethoxyphenyl) 3 pyridin-4-ylacrylonitrile;
- 3-(3,4-dimethoxyphenyl)-3-pyridin-2-ylacrylonitrile;
- 3-(3,4-dimethoxyphenyl)-3-(2-furyl)acrylonitrile;
- 3-(3,4-diethylphenyl)-3-phenylacrylonitrile;
- 3-(3,4-diethylphenyl)-3-(3,4-dimethoxyphenyl)acrylonitrile;

- 3-(3,4-dimethoxyphenyl) 3 (naphth-1-yl)acrylonitrile; and or
- 3-(3,4-dimethoxyphenyl)-3-(2,5-dichlorophenyl)acrylonitrile.
 - 8-11. (Canceled).
- 12. (Original) A pharmaceutical composition comprising a compound or mixture according to claim 1.
 - 13-15. (Canceled).
- 16. (Currently amended) A compound of claim 1, that which is an (E)-compound.
- 17. (Currently amended) A compound of claim 1, that which is an (Z)-compound.
- 18. (Original) A mixture of claim 1 comprising both (E)- and (Z)-compounds.
 - 19-22. (Canceled).
- 23. (Original) A pharmaceutical composition comprising a compound or mixture according to claim 4.
 - 24-26. (Canceled).
- 27. (Currently amended) A compound of claim 4, that which is an (E)-compound.
- 28. (Currently amended) A compound of claim 4, that which is an (Z)-compound.
- 29. (Original) A mixture of claim 4 comprising both (E)- and (Z)-compounds.

- 30-33. (Canceled).
- 34. (Original) A pharmaceutical composition comprising a compound or mixture according to claim 6.
 - 35-37. (Canceled).
- 38. (Currently amended) A compound of claim 6, that which is an (E)-compound.
- 39. (Currently amended) A compound of claim 6, that which is an (Z)-compound.
- 40. (Original) A mixture of claim 6 comprising both (E)- and (Z)-compounds.